

REMARKS

In response to the Office Action dated December 11, 2007, applicant submits the following amendments and remarks.

Claims 1, 3-15, 18-25, 27-39, 42-48 are pending. Claims 2, 16-17, 26, 40-41 are canceled without prejudice and without disclaimer of the subject matter disclosed therein. Reconsideration and allowance of the above-referenced application are respectfully requested in light of the following remarks.

Summary of Telephonic Interview

The applicant wishes to thank Examiner Smith for discussing proposed claims 1 and 25 with the applicant's undersigned representative on February 1, 2008.

The Examiner noted that U.S. Patent Number 6,728,421 issued to Kokemohr ("Kokemohr") did not disclose all of the features in the proposed claim 1; however, the Examiner indicated that proposed claim 1 or similar would be examined in light of Leszczynski et al., "The enhancement of radiotherapy verification images by an automated edge detection technique," Med. Phys. 19(3), May/June 1992, pp. 611-621 ("Leszczynski") and Pizer et al., "Adaptive Grey Level Assignment in CT Scan Display," Journal of Computer Assisted Tomography, April 1984, pp. 300-305 ("Pizer").

The Examiner also noted that if claim 25 were amended to recite a "computer readable storage device storing a computer program of instructions," the amendment would overcome the rejection under 35 U.S.C. § 101.

Claims

The specification supports amendments to independent claims 1, 19 and 25 at least at page 5, lines 8-12; page 7, lines 1-5, 10-12 and 25-27; page 8, lines 10-26; page 9, lines 4-12; page 10, lines 19-21 and 29-31; page 14, lines 4-20; and page 15, lines 4-9.

The applicant has amended claims 25, 27-39 and 42 to recite a computer readable storage device. The specification supports these amendments at least at page 18, lines 17-28.

The applicant respectfully requests the Examiner to enter these amendments.

Specification

The amendment filed September 11, 2007 has been objected to under 35 U.S.C. §132(a) because it allegedly introduces new matter into the disclosure. To expedite prosecution, and without conceding the correctness of the objection, the applicant has amended claims 1, 19, and 25.

Accordingly, the applicant respectfully requests the Examiner to withdraw this objection.

Section 112 Rejections

Claims 1-48 stand rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. To expedite prosecution, and without conceding the correctness of the rejection, the applicant has amended claims 1, 19, and 25.

Accordingly, the applicant respectfully requests the Examiner to withdraw this rejection.

Section 101 Rejections

Claims 25-42 stand rejected under 35 U.S.C. §101 for allegedly being directed to non-statutory subject matter. To expedite prosecution, and without conceding the correctness of the rejection, the applicant has amended claims 25, 27-39 and 42 in accordance with the Examiner's suggestion.

Accordingly, the applicant respectfully requests the Examiner to withdraw this rejection.

Section 103 Rejections

Claims 1-43 and 48 stand rejected under 35 U.S.C. §103 for allegedly being anticipated by Kokemohr in view of Leszczynski. The applicant submits that Kokemohr, Leszczynski, and Pizer, separately and in combination, do not disclose all of the features of claim 1.

Pizer and Leszczynski discuss Adaptive Histogram Equalization (AHE) and interpolated AHE. As the Examiner noted, AHE and interpolated AHE involve adjusting an image at

locations based on neighborhoods surrounding those locations. Nevertheless, Pizer and Leszczynski are not understood to disclose determining shadow and highlight neighborhoods, intensity values, and tone values as recited by claim 1.

The method recited in claim 1 facilitates much greater control and flexibility than AHE and interpolated AHE. In particular, the method of claim 1 permits different tonal regions to be modified in different ways. For example, for each location of the image, different neighborhoods can be determined, and thus different neighborhood intensities can be determined. Different tone functions can be used to determine separate shadow and highlight tone values. In this manner, different tonal regions of the image can be adjusted differently. This is particularly useful, for example, where a different adjustment is desired for shadow regions than is desired for highlight regions, as is often the case for personal digital photographs and the like.

In contrast, Pizer discloses a method where a grey level for a pixel is determined based only on a single characterization ("recorded intensity") of surrounding pixels (see Pizer at 304). Similarly, Leszczynski discloses a method that also relies on only a single characterization ("pixel intensity") (see Leszczynski at 612). Therefore, it is understood that the methods of Pizer and Leszczynski do not permit independent control of different tonal regions.

Therefore, the applicant respectfully submits that Pizer and Leszczynski do not disclose the all of the features of claim 1. Therefore, claim 1 is not obvious in light of Pizer and Leszczynski or the combination of Kokemohr, Pizer and Leszczynski.

Accordingly, claim 1 and its dependent claims are in condition for allowance. Claim 25 and its dependent claims are analogous program product claims and, as such, are also in condition for allowance. System 19-24 and 43-48 include similar limitations to claim 1 and are in condition for allowance for at least the same reasons.

Conclusion

By responding in the foregoing remarks only to particular positions taken by the examiner, the Applicant does not acquiesce with other positions that have not been explicitly addressed. In addition, the Applicant's arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist. Finally, the applicant's decision to amend or cancel any claim should not be understood as implying that the applicant agrees with any positions taken by the examiner with respect to that claim or other claims.

Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: March 7, 2008

/Daniel J. Burns/

Daniel J. Burns
Reg. No. 50,222

Customer No. 21876

Fish & Richardson P.C.
Telephone: (650) 839-5070
Facsimile: (650) 839-5071